



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,767	06/06/2005	Yuki Endo	Q88255	5081
65565	7590	09/25/2007	EXAMINER	
SUGHRUE-265550			LEE, JAE W	
2100 PENNSYLVANIA AVE. NW			ART UNIT	
WASHINGTON, DC 20037-3213			PAPER NUMBER	
			1656	
			MAIL DATE	
			DELIVERY MODE	
			09/25/2007	
			PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,767	Applicant(s) ENDO ET AL.	
	Examiner Jae W. Lee, Ph.D.	Art Unit 1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 7, 9 and 11 is/are allowed.
- 6) ☒ Claim(s) 6 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Application Status

Finality of the previous rejections is withdrawn.

In response to the previous Office actions, a Final rejection (mailed on 12/28/2006), Applicants filed a response and amendment received on 06/12/2007. Said amendment, amended Claims 1, 6, 8 and 9, canceled Claim 10, and added Claim 11. Claims 1-9 and 11 are at issue and present for examination.

Applicants' arguments filed on 08/13/2007, have been fully considered, and are deemed to be persuasive to overcome some of the rejections previously applied. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.

The text of those sections of Title 35 U.S. Code not included in the instant action can be found in a prior Office action.

Claim Objections

Claims 6 and 8 are objected to because of the following informalities:

Claims 6 and 8 recite "(1)" and "(2)," which can be improved with respect to clarity. The Examiner suggests replacing "(1)" and "(2)" with ---(a)--- and ---(b)---.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The previous rejection of Claims 1-10 under of 35 U.S.C. 112, first paragraph, written description, is withdrawn by the virtue of Applicant's amendment because the claims are now limited to the isolated polypeptide of SEQ ID NO: 2 or 4.

The previous rejection of Claims 1-10 under of 35 U.S.C. 112, first paragraph, scope of enablement, is withdrawn by the virtue of Applicant's amendment because the claims are now limited to the isolated polypeptide of SEQ ID NO: 2 or 4.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6 and 8 are rejected under 35 U.S.C. § 102(b) as being anticipated by Mitsuuchi et al. (Identification of a chromosome 3p14.3-21.1 gene, *APPL*, encoding an adaptor molecule that interacts with the oncoprotein-serine/threonine kinase AKT2, *Oncogene*, 1999, 18, 4891-4898).

The instant claims are drawn to a method for screening a substance which inhibits binding of a polypeptide described in claim 1, which comprises allowing (1) the

Art Unit: 1656

aforementioned polypeptide or a cell expressing the aforementioned polypeptide, to contact (2) a substance to be tested, measuring binding of said polypeptide with Akt2, and selecting a substance which inhibits the aforementioned binding.

The reference of Mitsuuchi et al. teaches the identification of a chromosome 3p14.3-21.1 gene, *APPL*, encoding an adaptor molecule that interacts with the oncoprotein-serine/threonine kinase AKT2. Said reference specifically teaches a yeast two-hybrid screening, wherein the human AKT2 is used as bait against proteins that are encoded by the human cDNA library (see pg 4897 under "Yeast two-hybrid screening"). Such screening assay method allows (i) a cell, which expresses all of the human proteins included in the cDNA library, including the human AKT2 which is SEQ ID NO: 4 of claim 1, to contact a substance to be tested, (ii) bind said proteins with AKT2, and (iii) select a substance which inhibits the protein-protein interaction. It is noted by the Examiner that the claimed methods are drawn to the use of any cell that expresses those SEQ ID NOs. Therefore, Claims 6 and 8 are anticipated by the teachings of Mitsuuchi et al.

Conclusion

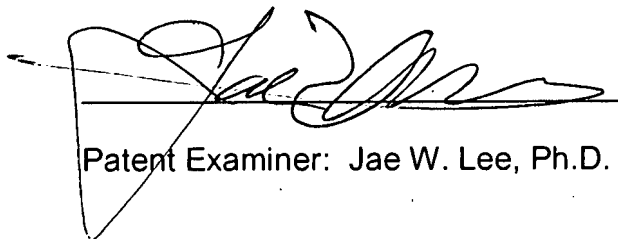
Claims 6 and 8 are not allowed for the reasons described above. Applicants must respond to the objections/rejections in this Office action to be fully responsive in prosecution.

The instant Office action is non-final.

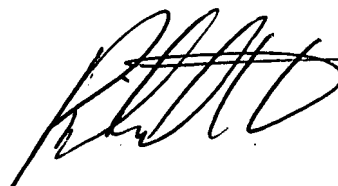
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jae W. Lee whose telephone number is 571-272-9949. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Patent Examiner: Jae W. Lee, Ph.D.



RICHARD HUTSON, PH.D.
PRIMARY EXAMINER